

CLAIMS¹

1. (Currently Amended) An image forming device management system, comprising:
a plurality of image forming devices;
a central service station for providing a maintenance service for the image forming devices; and
a communication control unit connected to each of the image forming devices by a signal line, the communication control unit connecting one of the image forming devices to the central service station by a communication network,
each of the image forming devices being configured to detect a ~~transmission fault~~ signal line separation from at least one of the central service station and the communication control unit over a predetermined period, ~~through a process the detection being periodically initiated performed~~ by each of the image forming devices, and to display a signal line separation message when the image forming device detects the ~~transmission fault~~ signal line separation from at least one of the central service station and the communication control unit over the predetermined period,
wherein each image forming device is one of a printer, a copier, and a facsimile machine.

2. (Currently Amended) The system according to claim 1, wherein each of the image forming devices is configured to detect the ~~transmission fault~~ signal line separation from the communication control unit over the predetermined period based on a response of the image forming device to a selecting of the communication control unit to the image forming device.

¹ This listing of claims will replace all prior versions and listings of claims in the application.

3. (Currently Amended) The system according to claim 1, wherein each of the image forming devices is configured to detect the ~~transmission-fault~~ signal line separation from the central service station over the predetermined period based on a response of the image forming device to a selecting of the central service station to the image forming device.

4. (Currently Amended) The system according to claim 1, wherein each of the image forming devices is configured to detect the ~~transmission-fault~~ signal line separation from the communication control unit over the predetermined period based on a response of the image forming device to a polling of the communication control unit to the image forming device.

5. (Currently Amended) The system according to claim 1, wherein each of the image forming devices includes a communication interface unit having a terminal connected to the communication control unit, and each of the image forming devices is configured to detect the ~~transmission-fault~~ signal line separation from the communication control unit over the predetermined period based on a detected voltage of the terminal of the communication interface unit.

6. (Currently Amended) The system according to claim 1, wherein each of the image forming devices includes a connection detecting circuit having an input connected to the communication control unit, and each of the image forming devices is configured to detect the ~~transmission-fault~~ signal line separation from the communication control unit over the predetermined period based on an output of the connection detecting circuit.

7. (Currently Amended) An image forming device management system, comprising:
a plurality of image forming devices;

a central service station for providing a maintenance service for the image forming devices; and

a communication control unit connected to each of the image forming devices by a signal line, the communication control unit connecting one of the image forming devices to the central service station by a communication network,

each of the image forming devices being configured to detect a ~~transmission fault~~ signal line separation of the communication control unit over a predetermined period, ~~through a process the detection being periodically initiated performed~~ by each of the image forming devices, and to display a signal line separation message when the image forming device detects the ~~transmission fault~~ signal line separation from the communication control unit over the predetermined period, and

wherein said display of the signal line separation message indicates a ~~transmission fault~~ signal line separation along the signal line between the image forming device and the communication control unit,

wherein each image forming device is one of a printer, a copier, and a facsimile machine.

8-29. (Cancelled)

30. (Currently Amended) An image forming device management system,
comprising:

a plurality of means for image forming;

maintenance service means provided for the plurality of means for image forming;

and

means for communicating and controlling, connected to each of the means for image forming by a signal line, the means for communicating and controlling connecting one of the means for image forming to the maintenance service means by a communication network,

each of the means for image forming being configured to detect a ~~transmission fault~~ signal line separation from at least one of the maintenance service means and the means for communicating and controlling over a predetermined period, the detection being through a process-periodically initiated performed by each of the means for image forming, and to display a signal line separation message when the means for image forming detects the ~~transmission fault~~, signal line separation from at least one of the maintenance service means and the means for communicating and controlling over the predetermined period,

wherein each of the means for image forming is one of a printer, a copier, and a facsimile machine.

31. (Currently Amended) The system according to claim 30, wherein each of the means for image forming is configured to detect the ~~transmission fault~~ signal line separation from the means for communicating and controlling over the predetermined period based on a response of the means for image forming to a selecting of the means for communicating and controlling to the means for image forming.

32. (Currently Amended) The system according to claim 30, wherein each of the means for image forming is configured to detect the ~~transmission fault~~ signal line separation from the maintenance service means over the predetermined period based on a response of the means for image forming to a selecting of the maintenance service means to the means for image forming.

33. (Currently Amended) The system according to claim 30, wherein each of the means for image forming is configured to detect the ~~transmission fault~~ signal line separation from the means for communicating and controlling over the predetermined period based on a response of the means for image forming to a polling of the means for communicating and controlling to the means for image forming.

34. (Currently Amended) The system according to claim 30, wherein each of the means for image forming includes a communication interface unit having a terminal connected to the means for communicating and controlling, and each of the means for image forming is configured to detect the ~~transmission fault~~ signal line separation from the means for communicating and controlling over the predetermined period based on a detected voltage of the terminal of the communication interface unit.

35. (Currently Amended) The system according to claim 30, wherein each of the means of image forming includes a connection detecting circuit having an input connected to the means for communicating and controlling, and each of the means for image forming is configured to detect the ~~transmission fault~~ signal line separation from the means for communicating and controlling over the predetermined period based on an output of the connection detecting circuit.

36. (Currently Amended) A means for image forming management, comprising:
a plurality of means for image forming;
maintenance service means provided for the means for image forming; and

means for communicating and controlling connected to each of the means for image forming by a signal line, the means for communicating and controlling connecting one of the means for image forming to the maintenance service means by a communication network,

each of the means for image forming being configured to detect a ~~transmission fault~~ signal line separation from the means for communicating and controlling over a predetermined period, ~~the detection being through a process periodically initiated performed~~ by each of the means for image forming, and to display a signal line separation message when the means for image forming detects the ~~transmission fault~~ signal line separation from the means for communicating and controlling over the predetermined period,

wherein each of the means for image forming is one of a printer, a copier, and a facsimile machine.

37. (New) The system of claim 1, wherein each of the image forming devices is configured to detect directly the signal line separation, without receiving a report from a second device that indicates that the signal line separation was detected by the second device: